

# Kush Agrawal

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mxun.wordpress.com

## EDUCATION

University of California, Berkeley 2015

Electrical Engineering and Computer Sciences

Languages

C++, Java, C, Python,

Objective-C, HTML,

English, Hindi, French

Looking for: A Software Developer/Program Manager internship starting Summer '13.

## RELEVANT COURSEWORK

Macintosh Student Developers for OS X/iOS, Data Structures & Algorithms, Structure and interpretation of Computer Programs, Computer Architecture, Linear Algebra & Differential Equations, Signals & Systems, Discrete Math & Probability Theory(In Progress)

## CO-FOUNDER IHEARTCODE (<http://www.iheartco.de/>)

Dec '11 - Oct '12

- 2 person startup that was part of the Mozilla WebFWD class of Summer 2012
- Received personal mentorship from industry leaders such as Pascal Finette
- Pitched to investors at demo day at Mozilla HQ in September '12
- Hosted one of Delhi's largest 'Hackathon's' in Summer '12 (<http://lisa.iheartco.de/>) & (<https://www.facebook.com/events/489078097772960/>)

- Read more about my team here:

<http://blog.webfwd.org/post/21333116294/new-team-intro-iheartcode>

## RESEARCH ASSISTANT Z-LAB (<http://zlabucb.blogspot.com/>)

Fall '11

- Worked with multiple lab equipment setups, and networking of machines
- Set up a blog for a performance at the Berkeley Art Museum
- Handled the social network outreach of the lab

## PRESIDENT, EXUN CLAN(Computer Science Club, <http://www.exunclan.com/>) 2009-2010

- Responsible to lead a 60+ member organisation to perform well in inter-school computer symposiums, and to get sponsors for organising our own inter-school symposium
- Took part and won in over 15 state level inter school Computer Symposiums
- Lead the team to 9 overall trophies in the year 2010
- National Cyber Olympiad finalist 5 times

## Comfortable with

Xcode, Eclipse, Map Reduce(Amazon EC2), Git, Parallelism, Balsamiq(for mock iOS prototyping), Sencha touch SDK, Google app engine, prezi, Unix, Twitter Bootstrap



**Regular on:** Hacker News, TechCrunch

## **Projects**

- Built and tested an iOS application to post stories to a person's facebook timeline. Used Facebook iOS SDK, Xcode and Open Graph. (Objective C)
- Built the hangman game for iOS.(Objective C)
- Completed multiple labs to learn iOS development(Calculator, Bouncy iOS game, Memory management etc.). Worked with multiple code samples.
- Using Twitter Bootstrap to create a personal website to display resume and portfolio of work(HTML, CSS, JavaScript)
- Used mapreduce on the Amazon EC2 servers to run an algorithm on a big data set to calculate co-occurrence rate between words present in the document(Java)
- Implemented a program that plays the game "Network" against a human player or another computer program(Java)
- Implemented a Weighted Undirected Graph data structure and used the Kruskal's Algorithm to find the minimum spanning trees of a graph(Java)
- Created an instruction interpreter for a subset of the MIPS instruction set (C)
- Implemented a 2 stage pipeline, 16-bit processor to handle certain CPU instructions in MIPS
- Developed a simulator and strategy function for the game of Pig. Implemented higher-order functions, experimented with random number generators, and generated some ASCII art(Python)
- Developed a geographic visualization of twitter data across the USA. Used dictionaries, lists, and data abstraction techniques(Python)
- Created a tower defense game called Ants Vs. SomeBees using functional and object-oriented programming paradigms(Python)
- Developed an interpreter for the Logo language(Python)

